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**A Note from Dan**

Why anyone would want to go to Las Vegas in the middle of August, when it's hotter than Hades there, is beyond me, but that's exactly what I did. That said, braving the heat was worth it because I got to attend [DEFCON 30](#), which bills itself as the "largest hacking and security conference" in the U.S. It was quite an intense experience.



On Thursday, I taught a one-day Tech class in the Ham Radio Village, which netted at least 15 newly-licensed hams. On Friday and Saturday, among many other activities, I attended an interesting talk on the [TinyGS homebrew satellite ground station](#) in the Aerospace Village. I also visited the Hardware Hacking Village, sponsor of the [Make Your Own Use Contest](#), in which entrants are encouraged to take a device and make it do something completely different from the application it was originally designed for. And, in the course of doing all this, I met a lot of cool people.

Ham radio definitely has a place at DEFCON. After all, aren't radio amateurs the original electronics hackers? I'm planning to return next year, so if you have any ideas as to how we can better represent amateur radio there, please [get in touch](#).

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**Next Grant Application Deadline: October 1**

The final deadline for submitting a grant application in 2022 is Sunday, October 1. After that date, you will still be able to submit applications, but they won't be reviewed until early 2023. To learn more about how to apply for a grant, go to <https://www.ampr.org/apply>.

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**Grant to Aid Deep Space Exploration Society**

A \$300,000 grant will help the [Deep Space Exploration Society \(DSES\)](#) become a regional center by supporting the construction of a modern facility that will include a control room and ham shack large

enough to accommodate visitors and student groups. The new facility will also have a meeting room, workshop, kitchenette, and unisex restroom.

An expanded control and educational building of 30 x 50 feet will enable DSES to engage universities and STEM students, participate in amateur radio contests, expand their investigation of weak signal propagation, and continue radio astronomy observations and data analysis of pulsars and hydrogen.

DSES is a Colorado-based nonprofit organization dedicated to practical astronomy, space science, and amateur radio education. They are restoring and operating a 60-ft. dish antenna for radio astronomy and amateur radio experimenting. The site is located in Kiowa County, in Colorado. In addition to the 60-ft. dish, DSES supports radio astronomy and amateur radio projects with smaller antennas and provides educational outreach in radio astronomy and amateur radio.

## Expanding the STEM Lab at the VOA Museum<sup>[OBJ]</sup>

A \$25,500 grant will allow the [National Voice of America \(VOA\) Museum of Broadcasting](#) in Bethany, OH, to expand and relocate the museum's STEM LAB. The STEM Lab was set up in 2018 to engage young people and explain the basics of radio. The interactive exhibit takes the visitor from the discovery of lodestone (natural magnetism) to the iPhone. It encourages the study of radio communications by showing how scientists and inventors, such as Alessandro Volta, Michael Faraday, Heinrich Hertz, and Guglielmo Marconi, discovered the laws of physics that make radio possible, and how these laws still apply to today's wireless devices.



The museum is dedicated to preserving the history of the VOA and to educating the public about how radio has impacted our lives. Bethany Station was the VOA's first high-power short wave transmission facility. Commissioned in 1942, Bethany housed six of the most powerful transmitters in the world and beamed programs to Europe, Africa, and South America. Using stories and displays, the museum connects the technology of radio with the extraordinary impact that radio has had, and continues to have, on society.

Many of the museum's offerings are targeted at young people. Using its club station, WC8VOA, the West Chester Amateur Radio Association has introduced Scouting groups and science clubs to amateur radio, and most recently, has hosted the Youth on the Air program.

## Come see us at ARRL/TAPR DCC and the GNU Radio Conference

Look for us at these upcoming hamfests and conferences:

- [ARRL/TAPR Digital Communications Conference \(DCC\)](#), Charlotte, North Carolina, September 16-18, 2022. John Hays, K7VE, and Rosy Schechter, KJ7RYV, will be attending this event. Rosy will be giving a talk at the banquet on Saturday, and John will be hosting an event featuring ARDC grantees on Sunday.
- [GNU Radio Conference \(GRCon22\)](#), Washington, DC, September 26-30, 2022. We won't have a table at GRCon, but Dan Romanchik, KB6NU, will be attending the conference and conducting a study session for those who will be taking the Technician Class license test there. The study session will take place Thursday morning.

## Contact Us!

We want to hear from you:

- Visit our website: <https://www.ampr.org>
- General info: [contact@ardc.net](mailto:contact@ardc.net)
- Information and questions about grants: [giving@ardc.net](mailto:giving@ardc.net)
- Network44 issues: [postmaster@ardc.net](mailto:postmaster@ardc.net)

Follow us on Twitter: [@ardc\\_73](https://twitter.com/ardc_73).

## Our Mission

The mission of Amateur Radio Digital Communications (ARDC) is to support, promote, and enhance digital communication and broader communication science and technology, to promote amateur radio, scientific research, experimentation, education, development, open access, and innovation in information and communication technology.

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